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EXAMINER	
ZHONG, CHAD	
ART UNIT	**PAPER NUMBER**
2152	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/742,165	HANNAWAY, G. WYNDHAM	
	Examiner	Art Unit	
	Chad Zhong	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

OFFICE ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/14/2005 has been entered.

2. Claims 1-26 are presented for examination. In amendment, filed on 09/14/2005:

Claims 1, 15, and 20 are currently amended.

Claims 2-14, 16-19, and 21-26 are previously presented, applicant's arguments are not persuasive, the previous rejections are maintained. In addition newly rejections are cited as stated below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 8, 11-21, and 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Kerr, US 5,844,600.

5. As per claim 1, Kerr teaches a synchronization system for time-based synchronization of streaming media transmitted over a communications network, comprising:

an input interface (Codec 114, Fig 3a, 3b) adapted for linking to the communications network to

receive a first and a second media stream (wherein the first and second media stream can be a combination of all video, all audio, i.e. all of the video and audio streams are sent separately, not multiplexed, see Col. 4, lines 45-50; Col. 3, lines 45-50; Col. 5, lines 24-26), wherein the first and second media streams comprise a plurality of digital data packets being transmitted over the communications network from a first and a second media source (the packet buffers for audio and video suggest the media streams are communicated via packets over network, Col. 6, lines 30-35 and lines 60-65), respectively;

a first data buffer for storing the data packets of the first media stream (Fig 3A, item 232 and 228);

a second data buffer for storing the data packets of the second media stream (Fig 3B, item 244); and

a controller (see for example, Col. 10, lines 1-30, wherein the controller is the combination of the external controller and the interface module, i.e. Codec) communicatively linked to the first and the second data buffers (see Fig 3A, 3B, wherein the controller/Codec is communicatively linked to the buffers) for selectively retrieving the data packets of the first and second media streams to form a first and a second time-adjusted stream (the delays in decompression and buffer will result in time adjusted stream, Col. 9, lines 18-20; Col. 10, lines 10-20),

wherein the controller determines a variable transmission delay (variable transmission delay is the delta delay, Col. 10, lines 1-20) for the first and the second media streams and performs the selective retrieving based on the determined variable transmission delays (the delays comprises of network delays in form of delta, processing delays within the buffer, compression/decompression delays, see for example, Col. 9, lines 15-22, lines 55-65; Col. 10, lines 1-10, the delays to either video or audio streams for the purpose of synchronization between the media streams is equivalent of selectively retrieval from the buffer);

wherein the controller is further configured for mixing the first and second time-adjusted streams into a composite media stream (the retrieved and processed streams are combined/synchronized to formulate a composite media stream, Col. 10, lines 20-23).

7. As per claim 2, Kerr teaches the first and the second media streams include a streaming video portion (Col. 10, lines 1-10).

8. As per claim 3, Kerr teaches the streaming video portion of the first media stream is compressed based on a first compression format and the second media stream is compressed based on a second compression format, the second compression format differing from the first compression format (Col. 10, lines 40-41).

9. As per claim 4, Kerr teaches a decoding device between the input interface and the first and second data buffers for processing compressed first and second media streams into a first decoded stream and a second decoded stream, respectively, for storage in the first data buffer and the second data buffer, wherein the first decoded stream and the second decoded stream have compatible formatting (Col. 4, lines 45-50; Col. 5, lines 55-60; Col. 6, lines 5-17, and lines 60-67; Col. 10, lines 40-41).

10. As per claim 8, Kerr teaches a data parsing device in communication with the input interface configured for retrieving time data from the first and the second media streams and for transmitting the time data to the controller, wherein the controller uses the time data to determine variable transmission delays (Col. 10, lines 1-20).

11. As per claim 11, Kerr teaches the composite media stream comprises a streaming video portion having picture-in-picture or side by side portions formed with the data packets of the first and the second time adjusted streams (Col. 12, lines 40-45).

12. As per claim 12, Kerr teaches the controller combines the first media stream and second media stream in the composite media stream such that a data packet transmitted in the first media stream from the first media source at a transmission time is matched with a corresponding data packet in the second

media stream transmitted from the second media source at the transmission time (Col. 10, lines 15-25).

17. As per claim 13, Kerr teaches the system of claim 12, wherein the combining is performed by the controller by selecting a transmission rate for the first and the second media streams to correct for the determined variable transmission delays (Col. 10, lines 1-25).

18. As per claim 14, Kerr teaches an output interface for transmitting the composite media stream from the controller over the communications network and including an end-user node linked to the communications network for receiving the composite media stream, wherein the end user node comprises a synchronizer for determining a variable transmission delay between the controller and the end user node and for performing time based correction of the composite media stream to adjust for the variable transmission delay (see for example, Col. 10, lines 1-25).

19. As per claim 15, Kerr teaches an apparatus for synchronizing media streams transmitted over a communication network, comprising:

an input interface linked to the communications network and configured for receiving a first and a second media stream transmitted by a first and a second media source, respectively, wherein the first media stream comprises a plurality of data packets encoded to a first compression standard and the second media stream comprises a plurality of data packets encoded to a second compression standard differing from the first compression standard (Col. 10, lines 1-20, and lines 40-50);

a decoder for decoding the first and the second media streams into a first and a second intermediate media stream, respectively, wherein the first and second intermediate streams are compatibly formatted (Col. 6, lines 15-20, and lines 60-67); and

a streaming media processor for combining the first and the second intermediate format media streams into a composite media stream encoded according to an output compression standard (Col. 10, lines 1-20).

20. As per claim 16, Kerr teaches a controller in communication with the input interface and the streaming media processor adapted for determining a variable transmission delay for the first and the second media streams based on a transmission time for a data packet of the first media stream and a time of receipt at the input interface of the data packet and on a transmission time for a data packet of the second media stream and a time of receipt at the input interface of the data packet (Col. 10, lines 1-10).

21. As per claim 17, Kerr teaches the controller is further configured for adjusting the first intermediate format media stream based on the variable transmission delay of the first media stream and for adjusting the second intermediate format media stream based on the variable transmission delay of the second media stream to create a first and a second time-adjusted stream (Col. 10, lines 1-20).

22. As per claim 18, Kerr teaches the processor combines the first and second time-adjusted stream to form the composite media stream with the first media stream data packet and the second media stream data packet being positioned for concurrent delivery (Col. 10, lines 20-30).

23. As per claim 19, Kerr teaches the time of receipt is determined based on a time reference signal received from an external timing reference (Col. 10, lines 1-20).

24. As per claim 20, Claim 20 is rejected for the same reasons as rejection to claim 1 above.

21. As per claim 21, Kerr teaches retrieving timing data from the first and second media stream (Col. 10, lines 1-27 and Col. 9, lines 30-45);

comparing the timing data with a reference time to determine a first and a second transmission delay value stream (Col. 10, lines 1-27 and Col. 9, lines 30-45); and

adjusting the first and the second media streams to correct for the first and the second transmission delay values (Col. 10, lines 1-27 and Col. 9, lines 30-45, lines 55-65).

22. As per claim 23, the claim is rejected for the same reasons as rejection to claim 1 above.

23. As per claim 24, Kerr teaches the adjusting includes matching the data packets of the first and the second media streams based on transmittal times from the first and the second media sources, respectively, whereby the first and the second media streams are presented in the synchronized media stream concurrently (Col. 10, lines 1-27).

24. As per claims 25 and 26, Claims 25 and 26 are rejected for the same reasons as rejections to claim 3 above.

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

26. Claim 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerr, US 5,844,600.

27. As per claim 5, Kerr does not explicitly teach the controller forms the composite media stream by combining the first and the second time-adjusted streams such that the second time-adjusted stream has a first data packet positioned at a start time adjacent a last data packet of the first time-adjusted stream positioned at an end time. Even though Kerr suggested in one embodiment (Fig 2b, item 116d), the invention can carry out a video or audio only conference, in the case for audio conference, it would have been obvious to the person of ordinary skill in the art at the time of the invention to placed the 2nd audio stream after the end of the 1st audio stream in order to maximize the utilization of the network bandwidth.

28. As per claim 6, Kerr teaches the controller is communicatively linked to an external timing reference for receiving a reference time value, and wherein the controller is adapted for using the reference time value to determine the start time and the end time (Col. 10, lines 1-20).

29. Claim 7-9, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerr, US 5,844,600, in view of Hejna, Jr. (hereinafter Hejna), US 6,934,759.

30. As per claim 7, Kerr does not explicitly teach the controller determines a length of the first media stream, compares the length with the end time and the variable network delay, computes an edit length for the first media stream, and compresses or lengthens the first media stream to form the first time-adjusted stream, whereby the last data packet coincides with the end time.
However, Hejna teaches a controller determines a length of the first media stream, compares the length with the end time (Interval Size is the end time for a particular interval, has beginning and ending segments with respect to time, Col. 5, lines 30-40) and the variable network delay (Col. 7, lines 20-35; Col. 8, lines 35-55), and compresses or lengthens the first media stream to form the first time adjusted stream, whereby the last data packet coincides with the end time (Col. 13, lines 28-45; Col. 29, lines 20-35, wherein if the rate speed up the length of the media stream is compressed, and if the rate slows down, the length of the media stream lengthens, last data packet is the end of the segment, i.e. the end time). It would have been obvious to the person of ordinary skill in the art at the time of the invention to combine teachings of Kerr and Hejna, because controller determines a length of the first media stream, compares the length with the end time and the variable network delay, computes an edit length for the first media stream, and compresses or lengthens the first media stream to form the first time-adjusted stream, whereby the last data packet coincides with the end time as taught by Hejna would enhance the capabilities of Kerr by adjusting the media stream for providing substantially continuous playback of

streaming media such as audio visual works received from sources having non-deterministic delays such as a file server over the Internet.

31. As per claim 9, Kerr does not explicitly teach the controller is adapted to create media server control signals based on the determined variable transmission delays and to transmit the signals over the communications network to the first and the second media sources to control transmission variables of the first and second media streams.
However, in a similar system, Hejna teaches the controller is adapted to created media server control signals over the communications network to the first and the second media sources to control transmission variables of the first and second media streams (Col. 9, lines 35-40, lines 50-55; Col. 10, lines 30-45, server receives control information to re-send data to particular clients). It would have been obvious to the person of ordinary skill in the art at the time of the invention to combine teachings of Kerr and Hejna, because controller is adapted to create media server control signals based on the determined variable transmission delays and to transmit the signals over the communications network to the first and the second media sources to control transmission variables of the first and second media streams as taught by Hejna would enhance the capabilities of Kerr by adjusting the media stream for providing substantially continuous playback of streaming media such as audio visual works received from sources having non-deterministic delays such as a file server over the Internet.

32. As per claim 10, Kerr does not explicitly teach the transmission variables are selected from the group consisting of transmission timing, transmission rate, and transmission length.
However, Hejna teaches the transmission variables are selected from the group consisting of transmission Timing (Col. 10, lines 34-45), transmission rate (Col. 5, lines 30-40), and transmission length (Col. 5, lines 30-40). It would have been obvious to the person of ordinary skill in the art at the time of the invention to combine teachings of Kerr and Hejna, because transmission variables are selected from the

group consisting of transmission timing, transmission rate, and transmission length as taught by Hejna would enhance the capabilities of Kerr by adjusting the media stream for providing substantially continuous playback of streaming media such as audio visual works received from sources having non-deterministic delays such as a file server over the Internet.

33. As per claim 22, the claim is rejected for the same reasons as rejection to claim 9 above.

Claim Rejections - 35 USC § 102

34. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

35. Claims 1-10, 12-13, 15, 20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Nelson et al. (hereinafter Nelson), US 4,598,397.

36. As per claim 1, Nelson teaches a synchronization system for time-based synchronization of streaming media transmitted over a communications network, comprising:

an input interface (wherein the interface is Fig 2, item 11) adapted for linking to the communications network to receive a first and a second media stream (see for example, Col. 5, lines 12-15, wherein the first media stream is asynchronous character oriented data, and second media stream is the synchronous terminal data), wherein the first and second media streams comprise a plurality of digital data packets being transmitted over the communications network from a first and a second media source (see for example, Col. 6, lines 55-67, wherein the sources comprises of plurality of clear channel devices and CODEC's), respectively (Col. 5, lines 12-15, lines 26-28, lines 31-35);

a first data buffer for storing the data packets of the first media stream (see for example, Fig 10(d)

item 312, wherein the buffer is storing information about the synchronous information);

a second data buffer for storing the data packets of the second media stream (see for example, Fig 10(d), item 320, wherein the buffer is storing asynchronous information); and

a controller (see for example, Fig 10(d), item 322) communicatively linked to the first and the second data buffers for selectively retrieving the data packets of the first and second media streams to form a first and a second time-adjusted stream (wherein the retrieving is done selectively depending on the mode of the system, i.e. synchronous or asynchronous, and judging from the clock signals going into items, 320 and 316, the original stream is adjusted in accordance with output of item 342, thus the time adjusted stream is realized, Col. 19, lines 15-20, Col. 20, lines 5-35; Col. 9, lines 66-67; Col. 10, lines 1-3, lines 12-13, lines 23-24),

wherein the controller determines a variable transmission delay (Col. 9, lines 24-26, Col. 13, lines 60-65, wherein the data is delayed prior to arriving at destination to allow proper synchronization. Furthermore, the controller 322 would determine the delay necessary, i.e. time in which the streams will be send out to the Multiplexsor and retrieve data from the buffers based on such a delay, this is because Nelson's invention is to combine different streams of data, see for example, Col. 25, lines 40-50) for the first and the second media streams and performs the selective retrieving based on the determined variable transmission delays (Col. 13, lines 60-64; Col. 10, line 67-Col. 11, line 10);

wherein the controller is further configured for mixing the first and second time-adjusted streams into a composite media stream (wherein the composite stream is realized through the Multiplexor item 318 on Fig 10, wherein the synchronous data and asynchronous data is combined into a stream; Col. 5, lines 12-15).

37. As per claim 2, Nelson teaches the system of claim 1, wherein the first and the second media streams include a streaming video portion (Col. 6, lines 57-58).

38. As per claim 3, Nelson teaches the system of claim 2, wherein the streaming video portion of the first media stream is compressed based on a first compression format and the second media stream is compressed based on a second compression format, the second compression format differing from the first compression format (Col. 5, lines 7-15, lines 26-28).

39. As per claim 4, Nelson teaches the system of claim 3, further including a decoding device between the input interface and the first and second data buffers for processing compressed first and second media streams into a first decoded stream and a second decoded stream, respectively, for storage in the first data buffer and the second data buffer, wherein the first decoded stream and the second decoded stream have compatible formatting (Col. 6, lines 58-63; Col. 7, lines 40-42).

40. As per claim 5, Nelson teaches the system of claim 1, wherein the controller forms the composite media stream by combining the first and the second time-adjusted streams such that the second time-adjusted stream has a first data packet positioned at a start time adjacent a last data packet of the first time-adjusted stream positioned at an end time (Col. 9, lines 50-52).

41. As per claim 6, Nelson teaches the system of claim 5, wherein the controller is communicatively linked to an external timing reference for receiving a reference time value, and wherein the controller is adapted for using the reference time value to determine the start time and the end time (Col. 10, lines 1-3, lines 12-13, lines 23-24).

42. As per claim 7, Nelson teaches the system of claim 5, wherein the controller determines a length of the first media stream (Col. 12, lines 26-29), compares the length with the end time and the variable network delay, computes an edit length for the first media stream, and compresses or lengthens the first media stream to form the first time-adjusted stream, whereby the last data packet coincides with the end time (Col. 13, lines 60-63; Col. 10, lines 12-13, lines 27-39, lines 67-68; Col. 11, lines 1-10).

43. As per claim 8, Nelson teaches the system of claim 1, further including a data parsing device in communication with the input interface configured for retrieving time data from the first and the second media streams and for transmitting the time data to the controller, wherein the controller uses the time data to determine variable transmission delays (Col. 10, lines 27-39; Col. 10, line 67-Col. 11, line 10).

44. As per claim 9, Nelson teaches the system of claim 7, wherein the controller is adapted to create media server control signals based on the determined variable transmission delays and to transmit the signals over the communications network to the first and the second media sources to control transmission variables of the first and second media streams (Col. 7, lines 4-13).

45. As per claim 10, Nelson teaches the system of claim 9, wherein the transmission variables are selected from the group consisting of transmission timing, transmission rate, and transmission length (Col. 12, lines 26-29; Col. 10, lines 23-24, lines 28-39).

46. As per claim 12, Nelson teaches the system of claim 1, wherein the controller combines the first media stream and second media stream in the composite media stream such that a data packet transmitted in the first media stream from the first media source at a transmission time is matched with a corresponding data packet in the second media stream transmitted from the second media source at the transmission time (Col. 5, lines 12-15; Col. 6, lines 59-63; Col. 10, lines 27-39).

47. As per claim 13, Nelson teaches the system of claim 12, wherein the combining is performed by the controller by selecting a transmission rate for the first and the second media streams to correct for the determined variable transmission delays (Col. 10, line 67-Col. 11, line 10; Col. 10, lines 27-39).

48. As per claim 14, Nelson teaches the system of claim 1, further including an output interface for transmitting the composite media stream from the controller over the communications network and

including an end-user node linked to the communications network for receiving the composite media stream (Col. 5, lines 12-15; Col. 5, lines 49-54), wherein the end user node comprises a synchronizer for determining a variable transmission delay between the controller and the end user node and for performing time based correction of the composite media stream to adjust for the variable transmission delay (see for example, Col. 14, lines 45-48).

49. As per claim 15, Nelson teaches an apparatus for synchronizing media streams transmitted over a communication network, comprising:

an input interface linked to the communications network and configured for receiving a first and a second media stream transmitted by a first and a second media source, respectively, wherein the first media stream comprises a plurality of data packets encoded to a first compression standard and the second media stream comprises a plurality of data packets encoded to a second compression standard differing from the first compression standard (Col. 5, lines 12-15, lines 25-27);

a decoder for decoding the first and the second media streams into a first and a second intermediate media stream, respectively, wherein the first and second intermediate streams are compatibly formatted (Col. 6, lines 58-63); and

a streaming media processor for combining the first and the second intermediate format media streams into a composite media stream encoded according to an output compression standard (Col. 5, lines 12-15, lines 25-27; Col. 6, lines 58-63).

50. As per claim 20, Claim 20 is rejected for the same reasons as rejection to claim 1 above.

51. As per claim 21, Nelson teaches the method of claim 20, further including:

retrieving timing data from the first and second media stream (Col. 5, lines 49-54);

comparing the timing data with a reference time to determine a first and a second transmission delay value (Col. 10, lines 1-3, lines 12-13, lines 23-24); and

adjusting the first and the second media streams to correct for the first and the second transmission delay values (Col. 10, lines 27-39; Col. 10, line 67-Col. 11, line 10).

52. As per claim 22, Nelson teaches the method of claim 21, wherein the adjusting includes creating a first and a second control signal in response to the first and the second transmission delay values, respectively, and includes transmitting the first and the second control signals to the first and the second media source to control transmittal of the first and the second media streams (Col. 7, lines 5-13; Col. 12, lines 26-29).

53. As per claim 23, Nelson teaches the method of claim 21, storing the data packets of the first media stream in a first data buffer and the data packets of the second media stream in a second data buffer (Col. 9, lines 62-63), and wherein the adjusting includes selectively retrieving the data packets of the first media stream from the first data buffer to correct for the first transmission delay value and selectively retrieving the data packets of the second media stream from the second butter to correct for the second transmission delay value (Col. 13, lines 60-64; Col. 10, line 67-Col. 11, line 10).

54. As per claim 24, Nelson teaches the method of claim 21, wherein the adjusting includes matching the data packets of the first and the second media streams based on transmittal times from the first and the second media sources, respectively, whereby the first and the second media streams are presented in the synchronized media stream concurrently (Col. 5, lines 12-15; Col. 6, lines 59-63; Col. 10, lines 27-39).

55. As per claims 25 and 26, Claims 25 and 26 are rejected for the same reasons as rejections to claim 3 above.

Claim Rejections - 35 USC § 103

56. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

57. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (hereinafter Nelson) 4,598,397, in view of Applicant Admitted Prior Art (AAPA), further in view of "FIRST GENERATION OF TRUE HDTV COMPONENT PRODUCTS AND ADVANCED LINE OF ANALOG PROJECTION TELEVISIONS UNVEILED BY MITUBUSHI CONSUMER ELECTRONICS AMERICA", Mitsubishi, 1999.

58. As per claim 11, Nelson does not explicitly teach the system of claim 1, wherein the composite media stream comprises a streaming video portion having picture-in-picture or side by side portions formed with the data packets of the first and the second time-adjusted streams.

59. AAPA teaches the system of claim 1, wherein the composite media stream comprises a streaming video portion having picture-in-picture or side by side portions formed with the data packets of the first and the second time-adjusted streams (pg 3, lines 21-24), for the advantage of multiple synchronized display options for the user, the specification mentions "user demand" such synchronization techniques. This advantage is further exemplified by Mitsubishi, see for example, page 2, "multiple picture system", wherein there exist plurality of display options for users.

60. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA, Mitsubishi and Nelson because they both dealing with combining streams into a composite stream. Furthermore, the teaching of AAPA to allow wherein the composite media stream comprises a streaming video portion having picture-in-picture or side by side portions formed with the data packets of the first and the second time-adjusted streams would improve the

functionality for Nelson's system by allowing for simultaneous display of streams on the same screen as disclosed in the Mitsubishi reference.

61. Claim 16-19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (hereinafter Nelson) 4,598,397, in view of Anderson et al. (hereinafter Anderson), US 6,115,422.

62. As per claim 16, Nelson does not teach the apparatus of claim 15, further including a controller in communication with the input interface and the streaming media processor adapted for determining a variable transmission delay for the first and the second media streams based on a transmission time for a data packet of the first media stream and a time of receipt at the input interface of the data packet and on a transmission time for a data packet of the second media stream and a time of receipt at the input interface of the data packet.

63. Anderson teaches the apparatus of claim 15, further including a controller in communication with the input interface and the streaming media processor adapted for determining a variable transmission delay for the first and the second media streams based on a transmission time for a data packet of the first media stream and a time of receipt at the input interface of the data packet and on a transmission time for a data packet of the second media stream and a time of receipt at the input interface of the data packet (Col. 13, lines 57-62; Col. 2, lines 24-40; Col. 3, lines 33-35, lines 55-57; Col. 4, lines 26-28).

64. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Nelson and Anderson because they both dealing with combine multiple streams into one stream based on a time synchronized fashion. Furthermore, the teaching of Anderson to allow a controller in communication with the input interface and the streaming media processor adapted for determining a variable transmission delay for the first and the second media streams based on a transmission time for a data packet of the first media stream and a time of receipt at the input interface of

the data packet and on a transmission time for a data packet of the second media stream and a time of receipt at the input interface of the data packet would improve the latency for Nelson's system by accelerate or decrease the rate of processing incoming signals based on amount of current delay in the system.

65. As per claim 17, Nelson teaches the apparatus of claim 16, wherein the controller is further configured for adjusting the first intermediate format media stream based on the variable transmission delay of the first media stream and for adjusting the second intermediate format media stream based on the variable transmission delay of the second media stream to create a first and a second time-adjusted stream (Col. 10, line 67-Col. 11, line 10; Col. 10, lines 27-39).

66. As per claim 18, Nelson teaches the apparatus of claim 17, wherein the processor combines the first and second time-adjusted stream to form the composite media stream with the first media stream data packet and the second media stream data packet being positioned for concurrent delivery (Col. 7, lines 5-13; Col. 5, lines 12-15, lines 49-54; Col. 9, lines 66-Col. 10, line 3).

67. As per claim 19, Nelson teaches the apparatus of claim 17, wherein the time of receipt is determined based on a time reference signal received from an external timing reference (Col. 10, lines 1-3, lines 12-13, lines 23-24; Col. 12, lines 26-29).

Response to Arguments

68. Applicant's arguments filed 09/14/2005 have been fully considered but they are not persuasive.

69. In the remarks, Applicant argued in substance that mixing is different from combining and multiplexing. In response to Applicant's arguments, in absence of definition of 'mixing' within applicant specification, dictionary meanings of the term must be relied upon for clear definition. Although

Applicant supplied IEEE dictionary meanings, however, does not mean that the standard definition of mixing is confined within the scope of IEEE dictionary meaning. Upon further prosecution, the Examiner found the meaning of 'mixing' is synonymous to 'combining'. Refer to Google definition of "mixing", specifically, www.bavc.org/glossary.htm teaches "combining more than one audio sources into a single audio signal output". Moreover, Google definition of "multiplexing" suggests "The act of combining input signals from many sources onto a single communications path, or the use of a single path for transmitting signals from several sources. Advantages of multiplexing is that it doubles the capacity of television transmission and allows for simultaneous feed of independent programs for two audiences", see www.tamu.edu/ode/glossary.html for additional details. Therefore, it is established that "multiplexing", "mixing" and "combining" are interchangeably used by the person of ordinary skill in the art. Applicant's amendment does not place the Application in better condition for allowance, the previous rejection is thus maintained.

Conclusion

70. Applicant's remarks filed 09/14/2005 have been considered but are not persuasive.

71. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Webcasting Method And System For Time Based Synchronization Of Multiple, Independent Media Streams".

i.	US 5596420	Daum
ii.	US 4833673	Chao et al.
iii.	US 6134379	LaMacchia
iv.	US 4587651	Nelson et al.
v.	US 5788812	Krause et al.

vi. US 5832085 Inoue et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAROENCHONWANIT, BUNJOB can be reached on (571)272-3913. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CZ
September 27, 2005

BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER